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EXAMINER
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NGUYEN BA, PAUL H

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application N .

09/599,809

Applicant(s)

KOTLER, MATTHEW J.

Examiner

Paul Nguyen-Ba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-105 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-105 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:


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## DETAILED ACTION

### *Notice to Applicant*

1. This action is in response to communications: original U.S. Patent application filed on June 21, 2000.
2. Claims 1-105 have been considered. Claims 1, 22, 34, 41, 51, 59, 69, 78, 82, 85, 87, 89, 92, 93, 95, 97, 98, and 104 are independent claims.

### *Claim Rejections - 35 USC § 102*

- 3  The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1, 3-41, 43, 44, 46-48, 50, 51, 53-58, 69, 71, 72, 75-78, 81, 85, 86, 92-95, 97-103, 105 are rejected under 35 U.S.C. 102(b) as being anticipated by Redpath, U.S. Patent No. 5,630,126.

### **Independent Claim 1**

Redpath discloses *an architecture comprising:*

*a table appearance manager to manage how a table appears in a document (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user edit, view, and print the math cells within a text document, compare with table appearance manager); and*

*a spreadsheet functionality manager to manage spreadsheet functions for the table (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations manage formulas, computations, and links between corresponding math cells).*

### **Claim 3**

Redpath further discloses *the architecture of claim 1, wherein the table appearance manager provides a formula edit box to permit the user to enter a formula into a cell of the table (see Figure 6; column 3, lines 9-14 and related discussion elsewhere in specification).*

### **Claim 4**

Redpath further discloses *the architecture of claim 1, wherein the table appearance manager comprises:*

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*a table component to support editing functionality of the table* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user edit, view, and print the math cells within a text document); *and*

*a spreadsheet component to receive data and formulas input into the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations receive formulas, computations, and links between corresponding math cells).

**Claim 5**

Redpath further discloses *the architecture of claim 1, wherein the spreadsheet functionality manager comprises:*

*a cell table to maintain data values and formulas used in the table* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations maintain formulas, computations, and links between corresponding math cells); *and*

*a format table to maintain formatting information used in the table* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user maintain editing information within the math cells).

**Claim 6**

Redpath further discloses *the architecture of claim 1, wherein the spreadsheet functionality manager comprises:*

*a cell table to maintain data values and formulas used in the table (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations maintain formulas, computations, and links between corresponding math cells); and*

*a recalculation engine to recalculate the formulas following a change to a data value or formula in the cell table (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).*

#### **Claim 7**

Redpath further discloses *the architecture of claim 1, wherein the spreadsheet functionality manager comprises:*

*a cell table to maintain data values and formulas used in the table (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations maintain formulas, computations, and links between corresponding math cells);*

*a delay parser to parse input for the cell table as needed (see column 6, lines 15-18 and related discussion elsewhere in specification → parses and evaluates input immediately if input is a formula or delays evaluation and assigns a value if input is a numeric value only); and*

*a recalculation engine to recalculate the formulas following a change to a data value or formula in the cell table (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).*

#### **Claim 8**

Redpath further discloses *the architecture of claim 1, wherein multiple tables appear in one or more documents, and the spreadsheet functionality manager is configured to maintain data and formulas for the multiple tables (see column 2, lines 36-38, 45-48; column 6, line 44*

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and related discussion elsewhere in specification → data can be arranged in multiple rows and columns and is managed by the instance data component).

#### **Claim 9**

Redpath further discloses *the architecture of claim 1, wherein multiple tables appear in one or more documents, and the spreadsheet functionality manager is configured to track references made from one table to another table* (see column 2, lines 39-40; column 4, lines 16-31 and related discussion elsewhere in specification → math cells are linked to one another).

#### **Claim 10**

Redpath further discloses *the architecture of claim 1, wherein multiple tables appear in one or more documents, and the spreadsheet functionality manager is configured to maintain data and formulas for the multiple tables and track references made from one table to another table, the spreadsheet functionality being further configured to update any data and formulas in the multiple tables that is affected by a change made to one of the tables* (see column 2, lines 39-40; column 4, lines 16-31 and related discussion elsewhere in specification → linked math cells are instantaneously updated).

#### **Claim 11**

Redpath further discloses *the architecture of claim 1, wherein multiple tables appear in one or more documents, and wherein:*

*the table appearance manager comprises multiple spreadsheet components so that there is one spreadsheet component for an associated table, each spreadsheet component being configured to capture data and formulas input into the associated table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and

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reevaluation operations first accepts formulas, computations, and links between corresponding math cells); *and*

*the spreadsheet functionality manager comprises multiple grid components so that there is one grid component for an associated table and an associated spreadsheet component, each grid component maintaining the data, the formulas, and formatting used in the associated table* (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also maintain formatting and data information).

#### **Claim 12**

Redpath further discloses *the architecture of claim 1, further comprising a document renderer to render the document* (see column 1, lines 12-22 → converts a file into a document visual form).

#### **Claim 13**

Redpath discloses *the architecture of claim 1, wherein the table appearance manager and the spreadsheet functionality manager reside on different computers* (see column 5, lines 4-6, 25-27).

#### **Independent Claim 14**

Redpath discloses *an architecture comprising:*

*a user interface to present a document containing text and a table* (see Figure 6 and 8, Abstract and related discussion elsewhere in specification);

*and a table management system to manage how the table appears in the document* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user edit, view, and



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print the math cells within a text document, compare with *table appearance manager*) and to *manage spreadsheet functions for the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations manage formulas, computations, and links between corresponding math cells).

**Claim 15**

Redpath further discloses *the architecture of claim 14, wherein the table management system provides a formula edit box to permit the user to enter a formula into a cell of the table* (see Figure 6; column 3, lines 9-14 and related discussion elsewhere in specification).

**Claim 16**

Redpath further discloses *the architecture of claim 14, wherein the table management system comprises:*

*a table component to support editing functionality of the table* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user edit, view, and print the math cells within a text document); *and*

*a spreadsheet component to receive data and formulas input into the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations receive formulas, computations, and links between corresponding math cells).

**Claim 17**

Redpath further discloses *the architecture of claim 14, wherein the table management system comprises:*

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*a cell table to maintain data values and formulas used in the table* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations maintain formulas, computations, and links between corresponding math cells); *and*

*a format table to maintain formatting information used in the table* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user maintain editing information within the math cells).

**Claim 18**

Redpath further discloses *the architecture of claim 14, wherein the table management system comprises:*

*a cell table to maintain data values and formulas used in the table* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations maintain formulas, computations, and links between corresponding math cells); *and*

*a recalculation engine to recalculate the formulas following a change to a data value or formula in the cell table* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).

**Claim 19**

Redpath further discloses *the architecture of claim 14, wherein the table management system comprises:*

*a cell table to maintain data values and formulas used in the table* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations maintain formulas, computations, and links between corresponding math cells);

*a delay parser to parse input for the cell table as needed (see column 6, lines 15-18 and related discussion elsewhere in specification → parses and evaluates input immediately if input is a formula or delays evaluation and assigns a value if input is a numeric value only); and*

*a recalculation engine to recalculate the formulas following a change to a data value or formula in the cell table (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).*

#### **Claim 20**

Redpath further discloses *the architecture of claim 14, wherein the document contains multiple tables, and the table management system is configured to maintain data and formulas for the multiple tables (see column 2, lines 36-38, 45-48; column 6, line 44 and related discussion elsewhere in specification → data can be arranged in multiple rows and columns and is managed by the instance data component).*

#### **Claim 21**

Redpath further discloses *the architecture of claim 14, wherein the user interface presents multiple tables in one or more documents, and the table management system is configured to maintain data and formulas for the multiple tables and track references made from one table to another table, the table management system being further configured to update any data and formulas in the multiple tables that is affected by a change made to one of the tables (see column 2, lines 39-40; column 4, lines 16-31 and related discussion elsewhere in specification → linked math cells are instantaneously updated).*

#### **Independent Claim 22**

Redpath discloses *an architecture comprising:*

*a complementary pair of spreadsheet and grid components for each table in the document* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification);

*the spreadsheet component receiving data and formulas entered into the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations first accepts formulas, computations, and links between corresponding math cells);

*the grid component tracking the data and formulas in relation to cells in the table* (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also maintain formatting and data information in relation to the math cells); *and*

*a recalculation engine to recalculate the formulas following a change to data in the grid component* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).

### **Claim 23**

Redpath further discloses *the architecture of claim 22, wherein new data is entered into the table and in response:*

*the spreadsheet component receives the data and passes the data onto the grid component* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations first accepts data between corresponding math cells and then calls a subroutine for storing and maintaining the data);

*the grid component stores the new data* (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores data information); *and*

*the recalculation engine recalculates any formula affected by the new data* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).

#### **Claim 24**

Redpath further discloses *the architecture of claim 22, wherein a new formula is entered into the table and in response:*

*the spreadsheet component receives the formula and passes it onto the grid component* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations first accepts formulas between corresponding math cells and then calls a subroutine for storing and maintaining the formulas);

*the grid component stores the formula* (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores formula information); *and*

*the recalculation engine recalculates any formula affected by the entry of the new formula* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated with formula upon change to data by user input).

#### **Claim 25**

*The architecture of claim 22, wherein the grid component comprises:*

*a cell table to maintain data values and formulas associated with the table* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations maintain formulas, computations, and links between corresponding math cells); *and a format table to maintain formatting information pertaining to the cells associated with the table* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user maintain editing information within the math cells).

**Claim 26**

Redpath further discloses *the architecture of claim 22, wherein the spreadsheet component provides a formula edit box user interface that permits user entry of a formula* (see Figure 6; column 3, lines 9-14 and related discussion elsewhere in specification).

**Claim 27**

Redpath further discloses *the architecture of claim 22, wherein the spreadsheet component facilitates referencing between cells in the table and between a first cell in a first table and a second cell in a second table* (see column 3, lines 60-61 → math cells with the same name in the formulas as other math cells functions are referenced to one another).

**Claim 28**

Redpath further discloses *the architecture of claim 22, wherein the spreadsheet component comprises:*

*a cell editing element to facilitate editing in the table* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification

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→ configuring operation helps the user edit, view, and print the math cells within a text document); *and*

*a cell behavior element to manage referencing between cells in the table and among cells in multiple tables* (see column 3, lines 60-61 → math cells with the same name in the formulas as other math cells functions are referenced to one another).

#### **Claim 29**

Redpath further discloses *the architecture of claim 22, further comprising a parser to parse the data and formulas received by the spreadsheet component* (see column 6, lines 15-18 and related discussion elsewhere in specification → parses and evaluates inputted data and formulas).

#### **Claim 30**

Redpath further discloses *the architecture of claim 22, further comprising a delay parser to parse the data and formulas received by the spreadsheet component on an as needed basis* (see column 6, lines 15-18 and related discussion elsewhere in specification → parses and evaluates input immediately if input is a formula or delays evaluation and assigns a value if input is a numeric value only).

#### **Claim 31**

Redpath further discloses *the architecture of claim 22, further comprising multiple complementary pairs of grid and spreadsheet components corresponding to multiple tables in the document* (see column 6, lines 7-28 and related discussion elsewhere in specification → the subroutine of the evaluation and reevaluation operations corresponds to tables).

#### **Claim 32**

Redpath further discloses *the architecture of claim 31, wherein a first grid component references a second grid component to support cross table referencing from a first table associated with the first grid component and a second table associated with the second grid component* (see column 2, lines 39-40; column 4, lines 16-31 and related discussion elsewhere in specification → format and cell data information are linked to one another).

### **Claim 33**

Redpath further discloses *the architecture of claim 32, wherein the recalculation engine, responsive to a change in the second grid component, recalculates a formula in the first grid component* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → recalculates formula upon modification).

### **Independent Claim 34**

Redpath discloses *an architecture comprising:*

*a document renderer to render a document containing at least one table;*

*a spreadsheet component associated with the table to accept data and formulas entered into the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations receive formulas, computations, and links between corresponding math cells); *and*

*a spreadsheet engine to manage the data and formulas and to recalculate the formulas as the data in the table is modified* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations manage formulas, computations, and links between corresponding math cells; and see column 2, lines 39-



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40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).

### **Claim 35**

Redpath discloses *the architecture of claim 34, wherein the document renderer resides on a different computer than the spreadsheet component and the spreadsheet engine* (see column 5, lines 4-6, 25-27).

### **Claim 36**

Redpath further discloses *the architecture of claim 34, wherein the spreadsheet component provides a formula edit box user interface that permits user entry of a formula* (see Figure 6; column 3, lines 9-14 and related discussion elsewhere in specification).

### **Claim 37**

Redpath further discloses *the architecture of claim 34, wherein the document contains first and second tables, further comprising:*

*first and second spreadsheet components for respective first and second tables, the spreadsheet components facilitating referencing between a first cell in the first table and a second cell in the second table* (see column 3, lines 60-61; column 3, lines 60-61 → math cell with the same name in the formulas of the other math cells functions as the source); *and*

*the spreadsheet engine managing the data and formulas in the first and second tables* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations manage formulas, computations, and links between corresponding math cells) *and recalculating the first cell in the first table in response to a change of the second cell in the second table* (see column 2, lines 39-40; column 4, lines 16-22

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and related discussion elsewhere in specification → content recalculated upon change to data by user input).

#### **Claim 38**

Redpath further discloses *the architecture of claim 34, wherein the document renderer renders a free floating field separate from the table* (see Figure 8; column 2, lines 45-53 → compare “math parts” with *free floating field*), *the architecture further comprising:*

*a spreadsheet component associated with the free floating field to accept a formula* (see column 3, lines 4-5 and related discussion elsewhere in specification → each math cell may include an associated formula or data to be used in other math parts); *and*

*the spreadsheet engine being further configured to manage the formula in the free floating field and to recalculate the formula as the table is modified* (see column 2, lines 39-40 and related discussion elsewhere in specification → content recalculated using the formula upon user input).

#### **Claim 39**

Redpath further discloses *the architecture of claim 34, wherein a particular cell in the table contains a non-calculation formula that is not evaluated by the spreadsheet engine but which defines a dependency between two cells* (see column 3, lines 4-14, lines 60-61 → math cells are linked or dependent to other math cells with the same name in the formulas).

#### **Claim 40**

Redpath discloses *the architecture of claim 34, further comprising a document object to perform insertion of the tables* (see column 2, lines 33-40 and related discussion elsewhere in specification → allows user to specify the location of cells within the document).

#### **Independent Claim 41**

Redpath discloses *an architecture comprising:*

*first and second tables renderable as part of a common document (see column 1, lines 12-22 → converts a file into a compound document visual form);*

*a first spreadsheet component to receive at least one of data or a first formula entered into a first cell in the first table (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations receive formulas, computations, or links between corresponding math cells);*

*a first grid component to hold the data or first formula in association with the first cell of the first table (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores data information);*

*a second spreadsheet component to receive at least a second formula entered into a second cell in the second table, the second formula referencing the first cell in the first table (see column 3, lines 60-61 → math cells with formulas of the same name are referenced); and*

*a second grid component to hold the second formula in association with the second cell of the second table (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores data information).*

#### **Claims 43**

Redpath further discloses *the architecture of claim 41, wherein the second spreadsheet component presents a formula edit box to allow user entry of the second formula (see Figure 6; column 3, lines 9-14 and related discussion elsewhere in specification).*

**Claims 44**

Redpath further discloses *the architecture of claim 41, wherein the second spreadsheet component facilitates reference editing to the first cell in the first table* (see column 3, lines 60-61 and related discussion elsewhere in specification).

**Claim 46**

Redpath further discloses *the architecture of claim 41, further comprising a recalculation engine to recalculate the second formula held in the second grid component in response to a change of the first cell in the first grid component* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → formulas recalculated after modification).

**Claim 47**

Redpath further discloses *the architecture of claim 46, wherein the first and second tables are updated to reflect a result produced by the recalculation engine* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → calculations are updated after modifications).

**Claim 48**

Redpath further discloses *the architecture of claim 46, wherein the first and second tables are updated to reflect a result produced by the recalculation engine* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification).

**Claim 50**

Redpath further discloses *the architecture of claim 41, further comprising:*  
*a free floating field renderable in the document but separately from the first and second tables* (see Figure 8; column 2, lines 45-53 → compare “math parts” with *free floating field*);

*a third spreadsheet component to receive a third formula entered into the free floating field* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations receive formulas, computations, or links between corresponding math cells); *and*

*a third grid component to hold the third formula* (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores data information).

#### **Claim 51**

Redpath discloses *a method comprising:*

*presenting a table within a document* (see column 2, lines 66+ → multiple cells form a table);

*receiving data and at least one formula referencing the data entered into the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations receives formulas, computations, and links between corresponding math cells; column 2, lines 39-40; column 4, lines 16-31 and related discussion elsewhere in specification → formulas are linked to entered data);

*managing the data and formula from the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations manage formulas, computations, and links between corresponding math cells);

*recalculating the formula in response to change of the data* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input); *and*

*presenting a modified table within the document, the modified table reflecting results from said recalculating (see Figure 8, Abstract, and related discussion elsewhere in specification).*

**Claim 53**

Redpath further discloses *the method of claim 51, wherein the managing comprises storing the data and formula in one or more objects associated with the table* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations store formulas, computations, and links between corresponding math cells).

**Claim 54**

Redpath further discloses *the method of claim 51, wherein the managing comprises: maintaining the data and formula in a first structure representative of the table* (see column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations maintain formulas, computations, and links between corresponding math cells); *and*

*maintaining formatting information for the table in a second structure representative of the table* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user maintain editing information within the math cells).

**Claim 55**

Redpath further discloses *the method of claim 51, wherein the recalculating comprises traversing a chain of formulas and calculating the formulas according to an order in the chain*

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(see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → mathematical order of operations).

#### **Claims 56**

Redpath further discloses *the method of claim 51, further comprising presenting a free floating field in the document and separate from the table, the free floating field containing a formula that references the data in the table* (see generally column 1, lines 45+ → source can be linked by reference to a math part from a different location).

#### **Claim 57**

Redpath further discloses *the method of claim 56, wherein the recalculating further comprises recalculating the formula in the free floating field in response to change of the data* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → recalculates formula after modifications).

#### **Claim 58**

Redpath further discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors, perform the method as recited in claim 56* (see column 5, lines 6-63).

#### **Independent Claim 69**

Redpath discloses *a method comprising:*

*presenting first and second tables within a document, the first and second tables being separate from one another document* (see column 1, lines 12-22 → converts a file into a compound document visual form);

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*receiving data for the first table* (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores data information);

*receiving a formula for the second table, the formula referencing the data in the first table* (see column 3, lines 60-61 → math cells with formulas of the same name are referenced);

*and upon modification of the data in the first table, automatically recalculating the formula in the second table* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → recalculates formula after modifications).

#### **Claim 71**

Redpath discloses *the method of claim 69, wherein the receiving formula comprises displaying a formula edit box in association with a cell of the table into which the formula is being entered, the formula edit box permitting user entry of the formula* (see Figure 6; column 3, lines 9-14 and related discussion elsewhere in specification).

#### **Claim 72**

Redpath further discloses *the method of claim 69, further comprising enabling a user to reference the data in the first table when entering the formula in the second table* (see column 2, lines 39-40; column 4, lines 16-31 and related discussion elsewhere in specification → math cells are linked to one another).

#### **Claim 75**

Redpath discloses *the method of claim 69, further comprising presenting a free floating field in the document and separate from the first and second tables* (see Figure 8; column 2, lines 45-53 → compare “math parts” with *free floating field*), *the free floating field containing a*



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*formula that references one of the data in the first table or the formula in the second table (see column 3, lines 60-61).*

**Claim 76**

Redpath discloses *the method of claim 75, wherein the recalculating further comprises recalculating the formula in the free floating field in, response to change of the data in the first table (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification).*

**Claim 77**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors, perform the method as recited in claim 69 (see column 5, lines 6-63).*

**Independent Claim 78**

Redpath discloses *a method comprising:*  
*presenting first and second tables within a document, the first table having at least one cell with contents (see column 6, lines 7-28 and related discussion elsewhere in specification);*  
*and referencing the cell in the first table from a cell in the second table (see column 3, lines 60-61).*

**Claim 81**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors, perform the method as recited in claim 78 (see column 5, lines 6-63).*

**Claim 85**

Redpath discloses *a method comprising:*

*integrating text and a spreadsheet table within a common document, the spreadsheet table supporting spreadsheet functionality* (see Abstract; column 2, lines 27-32 and related discussion elsewhere in the specifications);

*formatting the text according to a particular format* (see column 1, lines 12-22 → various word processors all allow formatting of text); *and*

*formatting cells in the spreadsheet table according to the particular format* (see generally Figure 2 and Abstract; column 6, lines 11-14 and related discussion elsewhere in specification → can arrange position and size of math part or add and modify text or values in the math part independent of text).

**Claim 86**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors, perform the method as recited in claim 85* (see column 5, lines 6-63).

**Independent Claim 92**

Redpath discloses *a method comprising:*

*integrating text and a first spreadsheet table within a common document, the spreadsheet table supporting spreadsheet functionality* (see Abstract; column 2, lines 27-32 and related discussion elsewhere in the specifications);

*creating a second spreadsheet table by cutting or copying all or part of the first spreadsheet table and pasting said all or part of the first spreadsheet table (see column 1, lines 45-64 → Object Linking and Embedding (OLE)); and*

*updating any references to cells in the first spreadsheet table or the second spreadsheet table to reflect the newly created second spreadsheet table (see column 2, lines 39-40; column 4, lines 16-31 and related discussion elsewhere in specification → linked math cells are instantaneously updated).*

### **Independent Claim 93**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors (see column 5, lines 6-63), performs the following:*

*construct a table user interface (UI) for display within a document (see Fig. 6 and 7; column 3, lines 9-14);*

*create a cell table to hold data and at least one formula for the table UI (see column 2, lines 45-48 and related discussion elsewhere in specification); and*

*upon modification of the data, recalculate the formula in the cell table to produce a new result (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).*

### **Claim 94**

Redpath discloses *the computer medium of claim 93, further comprising computer executable instructions that, when executed on one or more processors, perform creation of a*

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*format table to hold information pertaining to a data format of the table UI (see column 6, lines 11-14 → compare “configuring operation” with *format table*).*

#### **Independent Claim 95**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors (see column 5, lines 6-63), performs the following:*

*construct a first table user interface (UI) for display within a document (see Fig. 6 and 7; column 3, lines 9-14);*

*create a first cell table to hold data for the first table UI (see column 2, lines 45-48 and related discussion elsewhere in specification);*

*construct a second table user interface (UI) for display within the document table (see column 3, lines 60-61 → math cells with formulas of the same name are referenced);*

*create a second cell table to hold a formula for the second table UI, the formula referencing the data in the first cell table (see column 3, lines 60-61 → math cells with the same name in the formulas as other math cells functions are referenced to one another); and*

*upon modification of the data in the first cell table, recalculate the formula in the second cell table to produce a new result (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).*

#### **Independent Claim 97**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors (see column 5, lines 6-63), performs the following:*

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*construct a table user interface (UI) for display within a document (see Fig. 6 and 7; column 3, lines 9-14);*

*create a first cell table to hold data for the table UI (see column 2, lines 45-48 and related discussion elsewhere in specification);*

*construct a free floating field for display within the document (see Figure 8; column 2, lines 45-53 → compare “math parts” with free floating field);*

*create a second cell table to hold a formula, for the free floating field, the formula referencing the data in the first cell table (see column 3, lines 60-61 → math cells with the same name in the formulas as other math cells functions are referenced to one another);*

*and upon modification of the data in the first cell table, recalculate the formula in the second cell table to produce a new result (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).*

#### **Independent Claim 98**

Redpath discloses *a computer comprising:*

*a memory; a processing unit coupled to the memory (see column 5, lines 1-16); and*

*an architecture stored in the memory and executable on the processing unit to construct and display a document having a table with integrated spreadsheet functionality (see Abstract; column 5, lines 17-31).*

#### **Claim 99**

Redpath discloses *a computer as recited in claim 98, wherein the architecture constructs multiple tables within the document, at least one table containing a reference to contents in*

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*another table field* (see column 2, lines 38-40 → table consists of multiple “math cells”; see column 3, lines 60-61 → math cell with the same name in the formulas of the other math cells functions as the source; see column 2, line 40 and related discussion elsewhere in specification).

**Claim 100**

Redpath discloses *a computer as recited in claim 98, wherein the architecture constructs multiple tables within the document, the tables containing formulas referencing contents of other tables* (see column 2, lines 36-38, 45-48; column 6, line 44 and related discussion elsewhere in specification → data can be arranged in multiple rows and columns and is managed by the instance data component), *whereupon modification of content in one of the tables, the architecture automatically recalculates all formulas in the tables in the document* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).

**Claim 101**

Redpath discloses *a computer as recited in claim 98, wherein the architecture constructs a free floating field in the document, the free floating field containing a formula referencing content in the table* (see Figure 8; column 2, lines 45-53 → compare “math parts” with *free floating field*), *whereupon modification of content in the table, the architecture automatically recalculates the formulas in the free floating field* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).

**Claim 102**

Redpath discloses *a computer as recited in claim 98, wherein the architecture comprises:*

*a table appearance manager to manage how a table appears in the document (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user edit, view, and print the math cells within a text document, compare with *table appearance manager*); and*

*a spreadsheet functionality manager to manage spreadsheet functions for the table (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations manage formulas, computations, and links between corresponding math cells).*

#### **Claim 103**

Redpath discloses *a computer as recited in claim 98, wherein the architecture comprises a complementary pair of spreadsheet and grid objects for the table (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification), the spreadsheet object facilitating user entry of content into the table (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations first accepts formulas, computations, and links between corresponding math cells) and the grid object holding the content for the table (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also maintain formatting and data information in relation to the math cells).*

#### **Claim 105**

Redpath discloses *a data structure stored as recited in claim 104, further comprising a free floating field embedded in the text portion text (see Figure 8; column 2, lines 45-53 → compare “math parts” with *free floating field*), the free floating field referencing a cell in one of*

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*the first table or the second table* (see generally column 1, lines 45+ → source can be linked by reference to a math part from a different location).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 42, 45, 49, 52, 59-68, 70, 73, 74, 79, 82-84, 96, and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redpath, U.S. Patent No. 5,630,126, in view of Burch et al. ("Burch"), U.S. Patent No. 6,088,708.

**Claim 2**

Redpath discloses *an architecture comprising: a table appearance manager to manage how a table appears in a document* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification); *and a spreadsheet functionality manager to manage spreadsheet functions for the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification). Redpath does not specifically disclose the architecture wherein the document is a markup document.

However, Burch discloses a method for creating an HTML table for the purpose of converting a page with overlapping objects from an existing document into an online version of the page (see generally Abstract and related discussion elsewhere in the specification).



Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made convert the document into a markup document for the purpose of converting a page with overlapping objects from an existing document into an online version of the page.

**Claim 42**

Redpath discloses *an architecture comprising:*

*first and second tables renderable as part of a common document (see column 1, lines 12-22 → converts a file into a compound document visual form);*

*a first spreadsheet component to receive at least one of data or a first formula entered into a first cell in the first table (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification → evaluation and reevaluation operations receive formulas, computations, or links between corresponding math cells);*

*a first grid component to hold the data or first formula in association with the first cell of the first table (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores data information);*

*a second spreadsheet component to receive at least a second formula entered into a second cell in the second table, the second formula referencing the first cell in the first table (see column 3, lines 60-61 → math cells with formulas of the same name are referenced); and*

*a second grid component to hold the second formula in association with the second cell of the second table (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores data*

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information), but does not disclose the architecture wherein the first table is nested within the second table.

However, Burch discloses nested tables created within a single cell of a larger table in order to provide text adornments associated with objects on the page in an efficient manner (see Abstract and related discussion elsewhere in specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to nest the first table within the second table in order to provide text adornments associated with objects on the page in an efficient manner.

#### **Claim 45**

Redpath discloses the architecture of claim 41, wherein the second spreadsheet component facilitates reference editing to the first cell in the first table (see Claim 44 rejection above), but does not disclose the first table nested within the second table.

However, Burch discloses nested tables created within a single cell of a larger table in order to provide text adornments associated with objects on the page in an efficient manner (see Abstract and related discussion elsewhere in specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to nest the first table within the second table in order to provide text adornments associated with objects on the page in an efficient manner.

**Claim 49**

Redpath discloses *the architecture of claim 46, wherein the particular cell containing a non-calculation formula that is not evaluated by the recalculation engine but defines a dependency between the two cells* (see column 3, lines 4-14, lines 60-61 → math cells are linked or dependent to other math cells with the same name in the formulas), but does not specifically disclose *the first table is nested within a particular cell of the second table*.

However, Burch discloses nested tables created within a single cell of a larger table in order to provide text adornments associated with objects on the page in an efficient manner (see Abstract and related discussion elsewhere in specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to nest the first table within the second table in order to provide text adornments associated with objects on the page in an efficient manner.

**Claim 52**

Redpath discloses *a method comprising: presenting a table within a document* (see column 2, lines 66+); *receiving data and at least one formula referencing the data entered into the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification; and column 2, lines 39-40; column 4, lines 16-31 and related discussion elsewhere in specification); *managing the data and formula from the table* (see column 4, lines 3-31; column 6, lines 7-28 and related discussion elsewhere in specification); *recalculating the formula in response to change of the data* (see column 2, lines 39-40; column 4, lines 16-22 and

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related discussion elsewhere in specification; see Figure 8, Abstract, and related discussion elsewhere in specification).

Redpath does not specifically disclose the presentation comprising rendering a markup document.

However, Burch discloses a method for creating an HTML table for the purpose of converting a page with overlapping objects from an existing document into an online version of the page (see generally Abstract and related discussion elsewhere in the specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made convert the document into a markup document for the purpose of converting a page with overlapping objects from an existing document into an online version of the page.

#### **Independent Claim 59**

Redpath discloses *a method comprising:*

presenting a table user interface (UI) within a document, *the table UI containing data and at least one formula referencing the data* (see Fig. 6 and 7; column 3, lines 9-14);

*creating a cell table to hold the data and formula for the table UI* (see column 2, lines 45-48 and related discussion elsewhere in specification);

*creating a format table to hold formatting information for the table UI* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user maintain editing information within the math cells);

*receiving user input in the table UI (see column 6, lines 15-19);*

*parsing the user input to update the cell table and the format table (see column 6, lines 15-18 and related discussion elsewhere in specification → parses and evaluates inputted data and formulas);*

*in an event the user input changes the data being referenced, recalculating the formula in the cell table to produce a new result (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input); and*

*presenting the table UI with the new result (see column 7, lines 60+).*

Redpath does not specifically disclose presenting a table user interface within a markup document.

However, Burch discloses a method for creating an HTML table for the purpose of converting a page with overlapping objects from an existing document into an online version of the page (see generally Abstract and related discussion elsewhere in the specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made convert the document into a markup document for the purpose of converting a page with overlapping objects from an existing document into an online version of the page.

#### **Claim 60**

Redpath does not specifically disclose the method of rendering the table as an HTML table.

However, Burch discloses a method for creating an HTML table for the purpose of converting a page with overlapping objects from an existing document into an online version of the page (see generally Abstract and related discussion elsewhere in the specification).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made convert the document into a markup document for the purpose of converting a page with overlapping objects from an existing document into an online version of the page.

**Claim 61**

Redpath discloses *the method of claim 59, wherein the cell table references one or more cell objects, each cell object being associated with a cell in the table UI* (see column 2, lines 38-40).

**Claim 62**

Redpath discloses *the method of claim 59, wherein the format table contains formatting information for individual cells in the table UI* (see column 2, lines 45-48; column 4, lines 4-5, 19-22; column 6, lines 10-14, 43+ and related discussion elsewhere in specification → configuring operation helps the user maintain editing information within the math cells).

**Claim 63**

Redpath discloses *the method of claim 59, wherein the parsing determines whether the user input is a formula, data, or text and determines the data format of that input* (see column 6, lines 15-18 and related discussion elsewhere in specification → parses and evaluates inputted data and formulas).

**Claim 64**

Redpath discloses *the method of claim 59, wherein the recalculating comprises traversing a chain of formulas and calculating the formulas according to an order in the chain* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → mathematical order of operations).

#### **Claim 65**

Redpath discloses *the method of claim 59, wherein parsing comprises delaying parsing of selected cells in the cell table*(see column 6, lines 15-18 and related discussion elsewhere in specification → parses and evaluates input immediately if input is a formula or delays evaluation and assigns a value if input is a numeric value only) *and the recalculating comprises inducing additional parsing of the selected cells as needed by the formula* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).

#### **Claim 66**

Redpath discloses *the method of claim 59, further comprising presenting a free floating field in the document and separate from the table, the free floating field containing a formula that references the data in the table* (see generally column 1, lines 45+ → source can be linked by reference to a math part from a different location).

#### **Claim 67**

Redpath discloses *the method of claim 66, wherein the recalculating further comprises recalculating the formula in the free floating field in response to change of the data* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → content recalculated upon change to data by user input).

**Claim 68**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors, perform the method as recited in claim 59* (see column 5, lines 6-63).

**Claim 70**

Redpath discloses *a method comprising:*

*presenting first and second tables within a document, the first and second tables being separate from one another document* (see column 1, lines 12-22 → converts a file into a compound document visual form);

*receiving data for the first table* (see column 6, lines 7-28 and related discussion elsewhere in specification → a subroutine of the evaluation and reevaluation operations also stores data information);

*receiving a formula for the second table, the formula referencing the data in the first table* (see column 3, lines 60-61 → math cells with formulas of the same name are referenced);

*and upon modification of the data in the first table, automatically recalculating the formula in the second table* (see column 2, lines 39-40; column 4, lines 16-22 and related discussion elsewhere in specification → recalculates formula after modifications), but does not specifically disclose nesting the first table within the second table.

However, Burch discloses nested tables created within a single cell of a larger table in order to provide text adornments associated with objects on the page in an efficient manner (see Abstract and related discussion elsewhere in specification).



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Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to nest the first table within the second table in order to provide text adornments associated with objects on the page in an efficient manner.

**Claim 73**

Claim 73 incorporates substantially similar subject matter as claim 45, and is rejected along the same rationale.

**Claim 74**

Claim 74 incorporates substantially similar subject matter as claim 49, and is rejected along the same rationale.

**Claim 79**

Redpath discloses a *method comprising:*

*presenting first and second tables within a document, the first table having at least one cell with contents* (see column 6, lines 7-28 and related discussion elsewhere in specification);

*and referencing the cell in the first table from a cell in the second table* (see column 3, lines 60-61), but does not specifically disclose nesting the first table within the second table.

However, Burch discloses nested tables created within a single cell of a larger table in order to provide text adornments associated with objects on the page in an efficient manner (see Abstract and related discussion elsewhere in specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have

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been obvious to a person of ordinary skill in the art at the time the invention was made to nest the first table within the second table in order to provide text adornments associated with objects on the page in an efficient manner.

### **Independent Claim 82**

Redpath discloses a *method comprising: creating a first spreadsheet table for display in a document* (see Abstract; column 4, lines 3-31 and related discussion elsewhere in the specifications); *and creating a second spreadsheet table for display in the document*, (see column 1, lines 45-64), but does not specifically disclose *the second spreadsheet table being nested within the first spreadsheet table when displayed*.

However, Burch discloses nested tables created within a single cell of a larger table in order to provide text adornments associated with objects on the page in an efficient manner (see Abstract and related discussion elsewhere in specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to nest the first table within the second table in order to provide text adornments associated with objects on the page in an efficient manner.

### **Claim 83**

Redpath discloses *a data structure stored on a computer readable medium, the data structure being produced as a result of the method of claim 82* (see column 5, lines 32-63).

**Claim 84**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors, perform the method as recited in claim 82* (see column 5, lines 1-16).

**Claim 96**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors* (see column 5, lines 6-63), but does not specifically disclose the first table UI nested within the second table UI.

However, Burch discloses nested tables created within a single cell of a larger table in order to provide text adornments associated with objects on the page in an efficient manner (see Abstract and related discussion elsewhere in specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to nest the first table UI within the second table UI in order to provide text adornments associated with objects on the page in an efficient manner.

**Claim 104**

Redpath discloses *a document stored on a computer readable medium* (see column 5, lines 1-16) *and renderable on a display* (see Fig. 6 and 7; column 3, lines 9-14), *comprising: a text portion* (see Figure 6 and 8, Abstract and related discussion elsewhere in specification); *a first spreadsheet table having multiple cells* (see column 2, lines 66+ → multiple cells form a

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table), but does not specifically disclose a markup document stored on a computer readable medium or a second spreadsheet table nested within a cell of the first spreadsheet table.

However, Burch discloses a method for creating an HTML table for the purpose of converting a page with overlapping objects from an existing document into an online version of the page (see generally Abstract and related discussion elsewhere in the specification).

Burch also discloses nested tables created within a single cell of a larger table in order to provide text adornments associated with objects on the page in an efficient manner (see Abstract and related discussion elsewhere in specification).

Since Redpath and Burch are both from the same field of endeavor, the purpose disclosed by Burch would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made convert the document into a markup document for the purpose of converting a page with overlapping objects from an existing document into an online version of the page and to nest the second spreadsheet table within the first spreadsheet table in order to provide text adornments associated with objects on the page in an efficient manner.

8. Claims 80, 87-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redpath, U.S. Patent No. 5,630,126, in view of Curbow et al ("Curbow"), U.S. Patent No. 5,669,005.

#### **Claim 80**

Redpath discloses a *method comprising*:

*presenting first and second tables within a document, the first table having at least one cell with contents (see column 6, lines 7-28 and related discussion elsewhere in specification); and referencing the cell in the first table from a cell in the second table (see column 3, lines 60-61), but does not specifically disclose referencing comprising of using a pointer to the reference cell.*

However, Curbow discloses the use of a reference pointer for the purpose of selecting, dragging, or maneuvering objects or data fields with relative ease (i.e. reference cells) (see Figures).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a reference pointer for the purpose of selecting, dragging, or maneuvering objects and data fields with relative ease.

#### **Independent Claim 87**

Redpath discloses *a method comprising:*

*integrating text and a spreadsheet table within a common document (see Abstract; column 5, lines 3-6), the spreadsheet table supporting spreadsheet functionality (see column 4, lines 4-23), but does not specifically disclose evaluating the text and the spreadsheet table concurrently for possible spelling or grammatical errors.*

However, Curbow discloses that a control function can be selected from a group of functions commonly found in word processing, text editing, or spreadsheet programs (i.e. spelling and grammar check) for the purpose of simplicity resulting from the fact that the user only has to learn one way to perform a particular task, such as editing text (see column 5, lines 44-46; column 17, lines 60-65 and related discussion elsewhere in specification).

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to allow the selection of control functions from a group of familiar functions commonly found in word processing, text editing, or spreadsheet programs (i.e. spelling and grammar check) for the purpose of simplicity resulting from the fact that the user only has to learn one way to perform a particular task, such as editing text.

#### **Claim 88**

Redpath discloses *a computer readable medium having computer-executable instructions that, when executed on one or more processors, perform the method as recited in claim 87* (see column 5, lines 6-63).

#### **Independent Claim 89**

Redpath discloses *a method comprising:*

*integrating text and a spreadsheet table within a common document* (see Abstract; column 5, lines 3-6), *the spreadsheet table supporting spreadsheet functionality* (see column 4, lines 4-23), but does not specifically disclose *enabling a user to select a control function to modify or evaluate an aspect of the document; and applying the control function across both the text and the spreadsheet table.*

However, Curbow discloses a method of *enabling a user to select a control function to modify or evaluate an aspect of the document; and applying the control function across both the text and the content parts* for the purpose of simplicity resulting from the fact that the user only has to learn one way to perform a particular task, such as editing text (see Curbow, column 2, lines 66-67 to column 3, lines 1-9 and related discussion elsewhere in specification).

Since Redpath and Curbow are both from the same field of endeavor, the purpose disclosed by Curbow would have been recognized in the pertinent art of Redpath. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add control functions to further integrate text and free floating fields within a common document to modify or evaluate an aspect of the document; and to apply the control function across both the text and the content parts for the purpose of simplicity stemming from the fact that the user only has to learn one way to perform a particular task, such as editing text.

#### **Claim 90**

Redpath discloses *the method of claim 89*, but does not specifically disclose a control function being *selected from a group of functions including formatting, spell checking, grammar to checking, find, find and replace, auto-correct, applying document themes, inserting lists, images, drawings, charts, hyperlinks, automatic detection of hyperlinks, and automatic detection of lists.*

However, Curbow discloses that the control function can be selected from a group of functions commonly found in word processing, text editing, or spreadsheet programs for the purpose of simplicity resulting from the fact that the user only has to learn one way to perform a particular task, such as editing text (see column 5, lines 44-46; column 17, lines 60-65 and related discussion elsewhere in specification).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to allow the selection of control functions from a group of familiar functions commonly found in word processing, text editing, or spreadsheet programs for the

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purpose of simplicity resulting from the fact that the user only has to learn one way to perform a particular task, such as editing text.

#### **Claim 91**

Redpath discloses *the method of claim 89*, but does not specifically disclose the method *wherein the control function is any text feature that can be applied to the text and the applying comprises applying that text feature to the spreadsheet table.*

However, Curbow discloses that the control function is any text feature that can be applied to the text and the applying comprises applying that text feature to the spreadsheet table (see column 3, lines 2-9; column 14, lines 25+ and related discussion elsewhere in specification).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply any text feature applied to the text to the free floating field as well, for the purpose of simplicity resulting from the fact that the user only has to learn one way to perform a particular task, such as editing text.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Nguyen-Ba whose telephone number is (703) 305-8776. The examiner can normally be reached on 9 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

PNB

  
JOSEPH H. FEILD  
PRIMARY EXAMINER